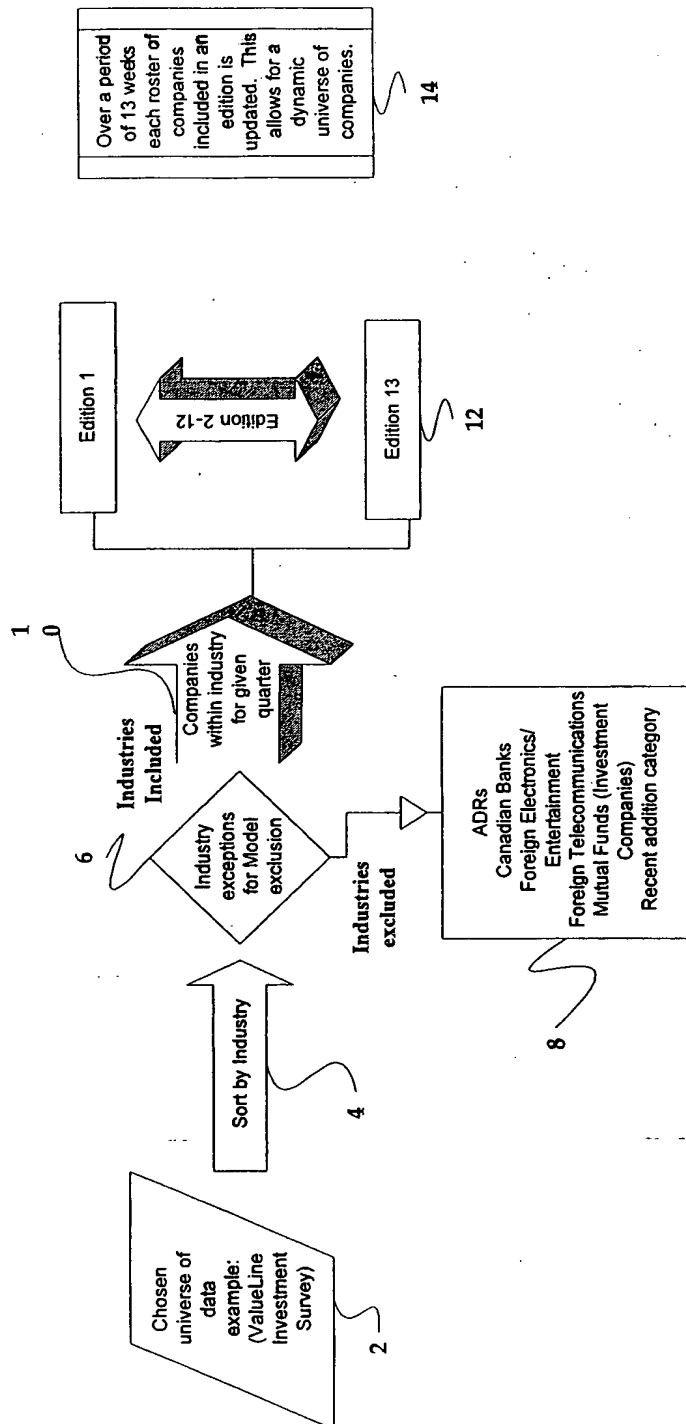




## Data Frame Phase (Universe Determination)



The Data Frame Phase determines the industries, companies, and time period to be included into the Model. A different (of 13) edition is updated weekly by ValueLine and aggregated monthly by the model, so over a period of 3 months, all editions are updated.

Figure 1

Data Intrusion Stage

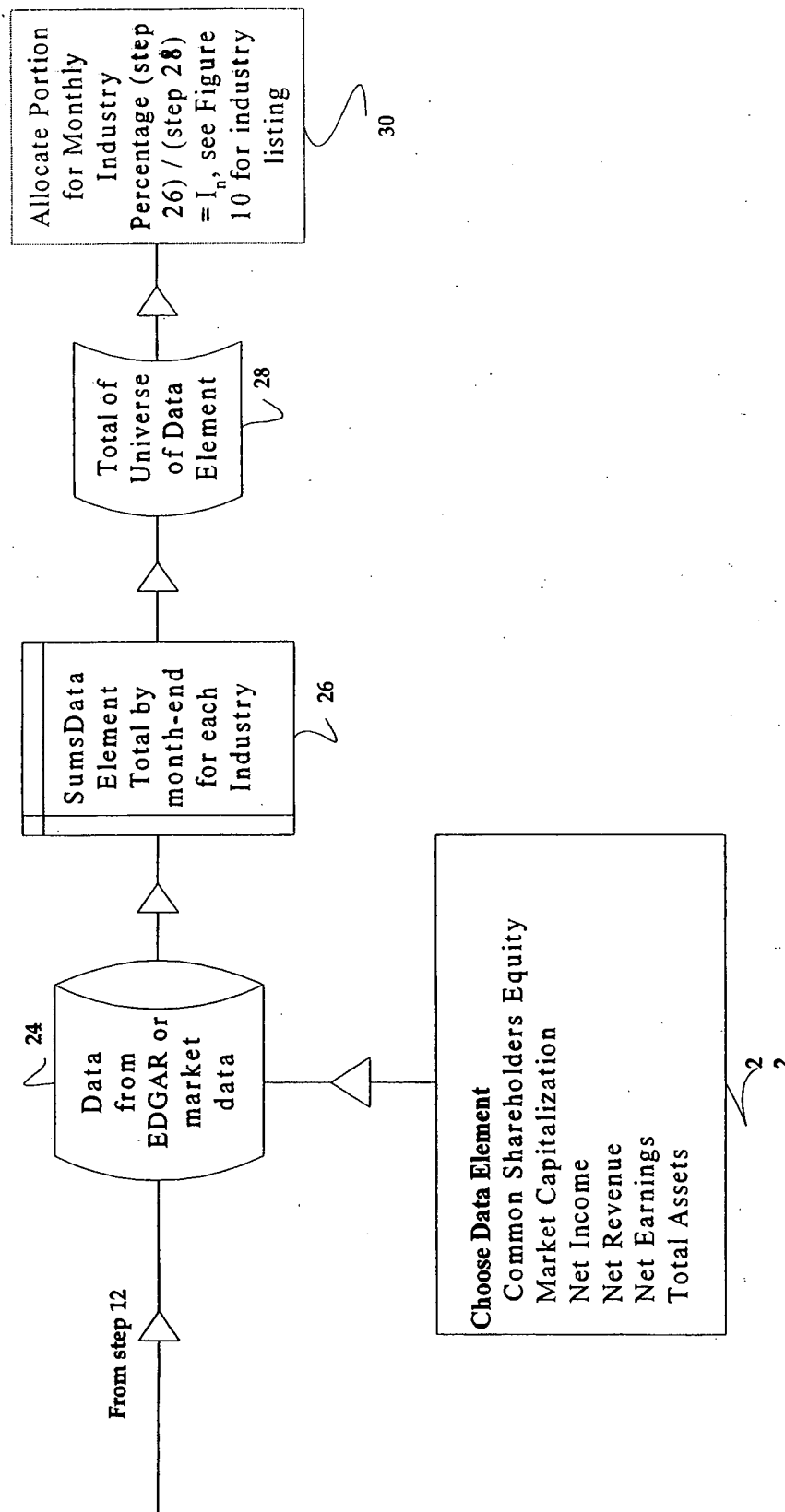


Figure 2

Industry Representation Process for Chosen  
 Individual Allocation Limit  
 Step 1

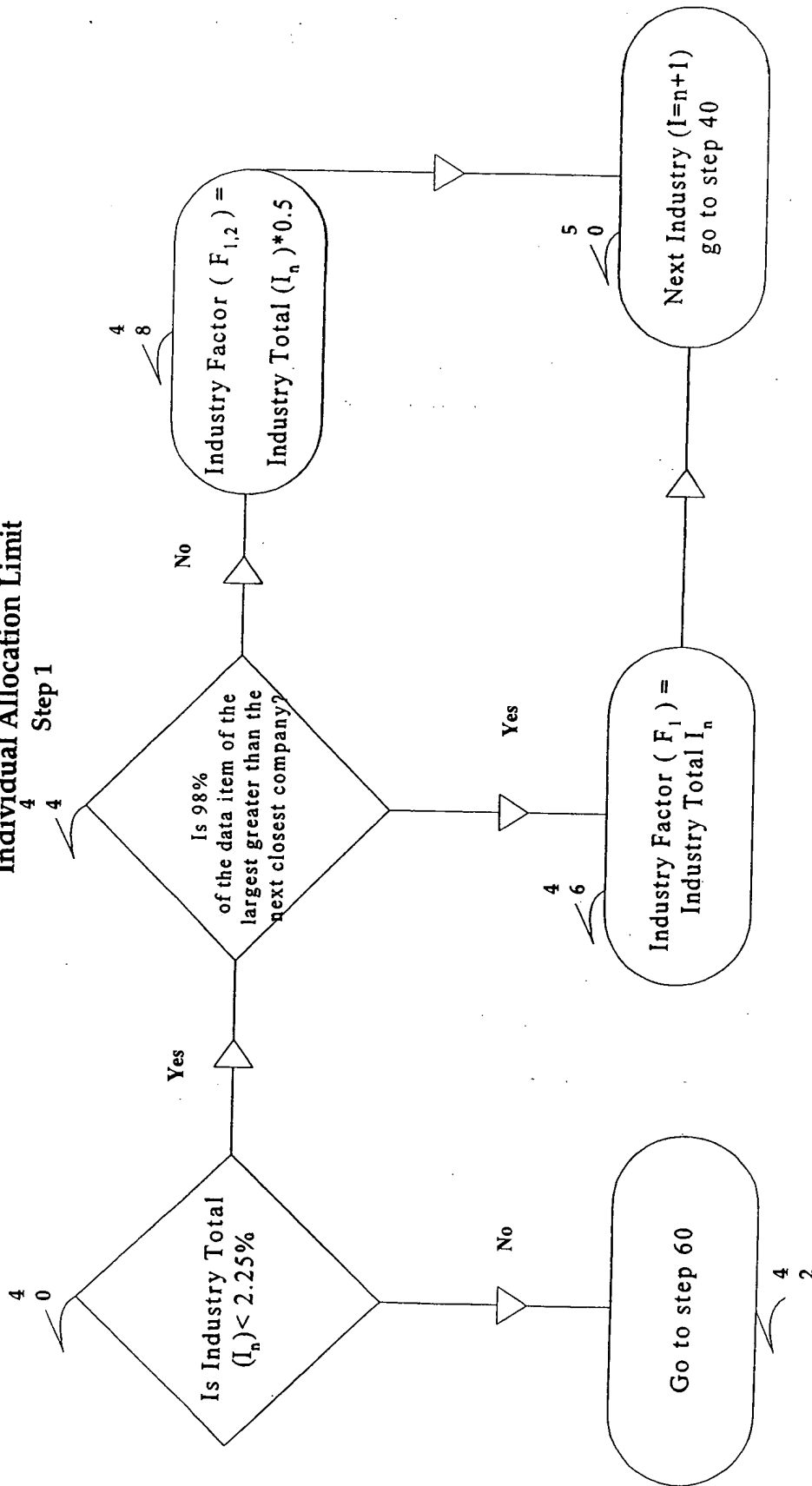
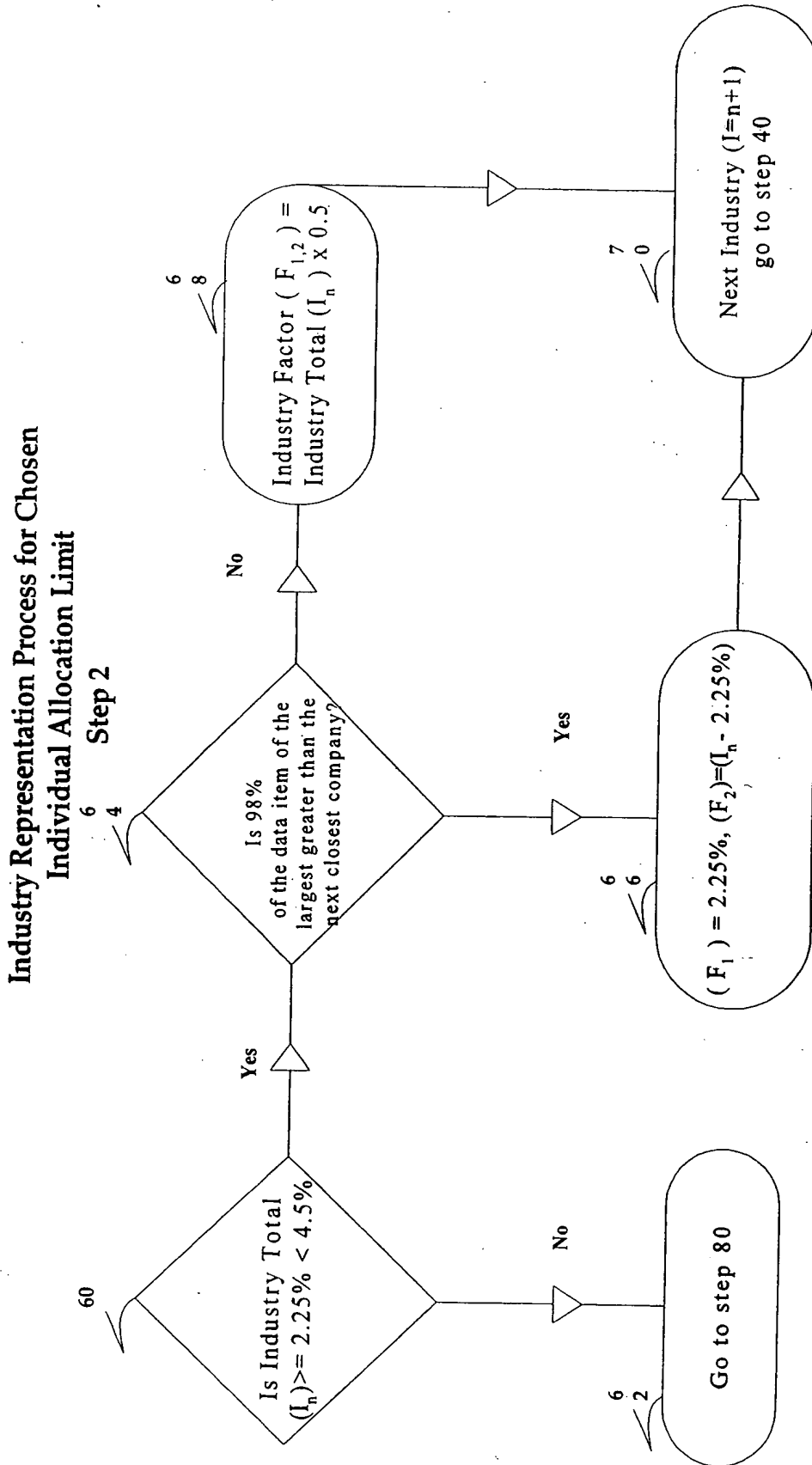
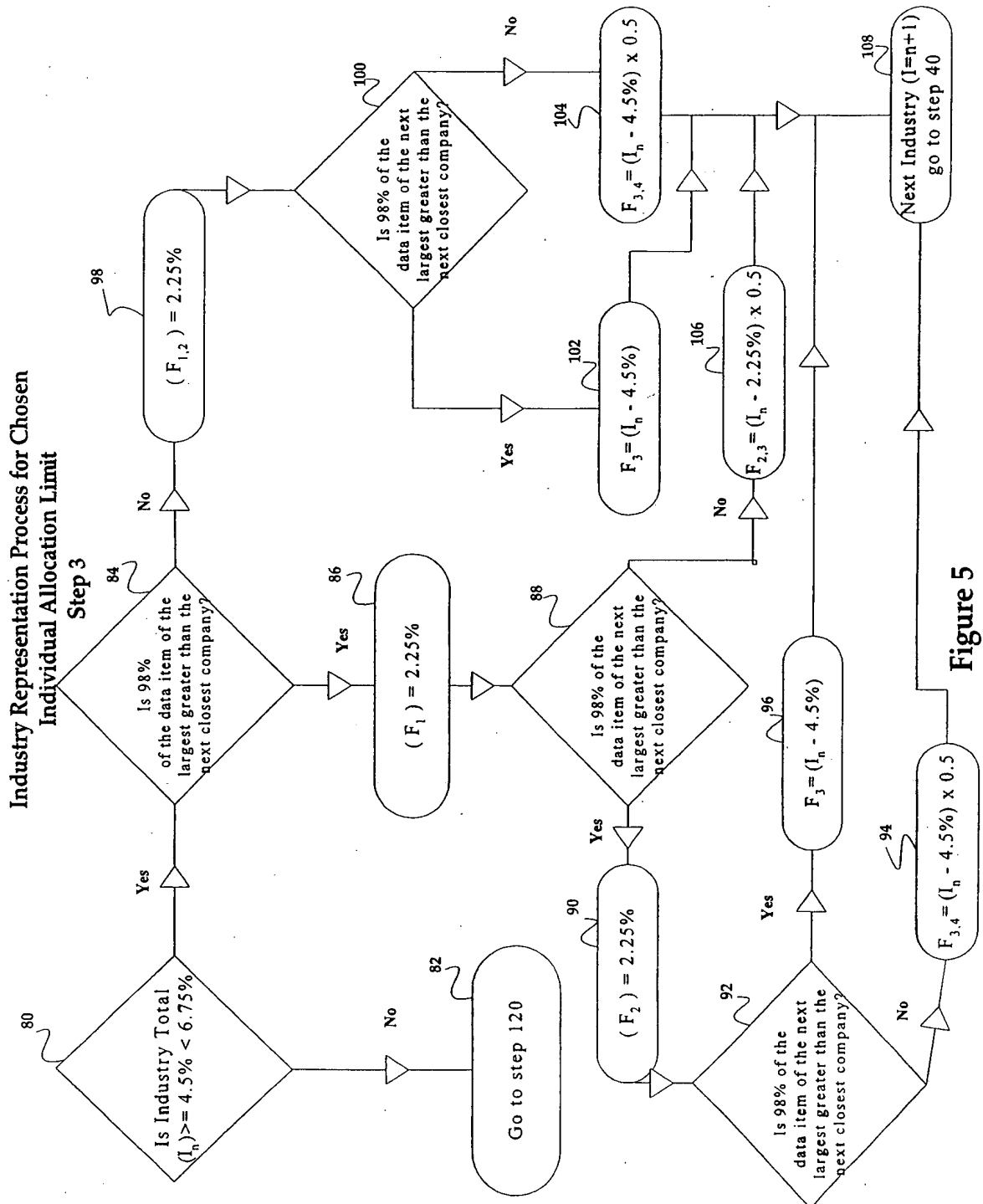
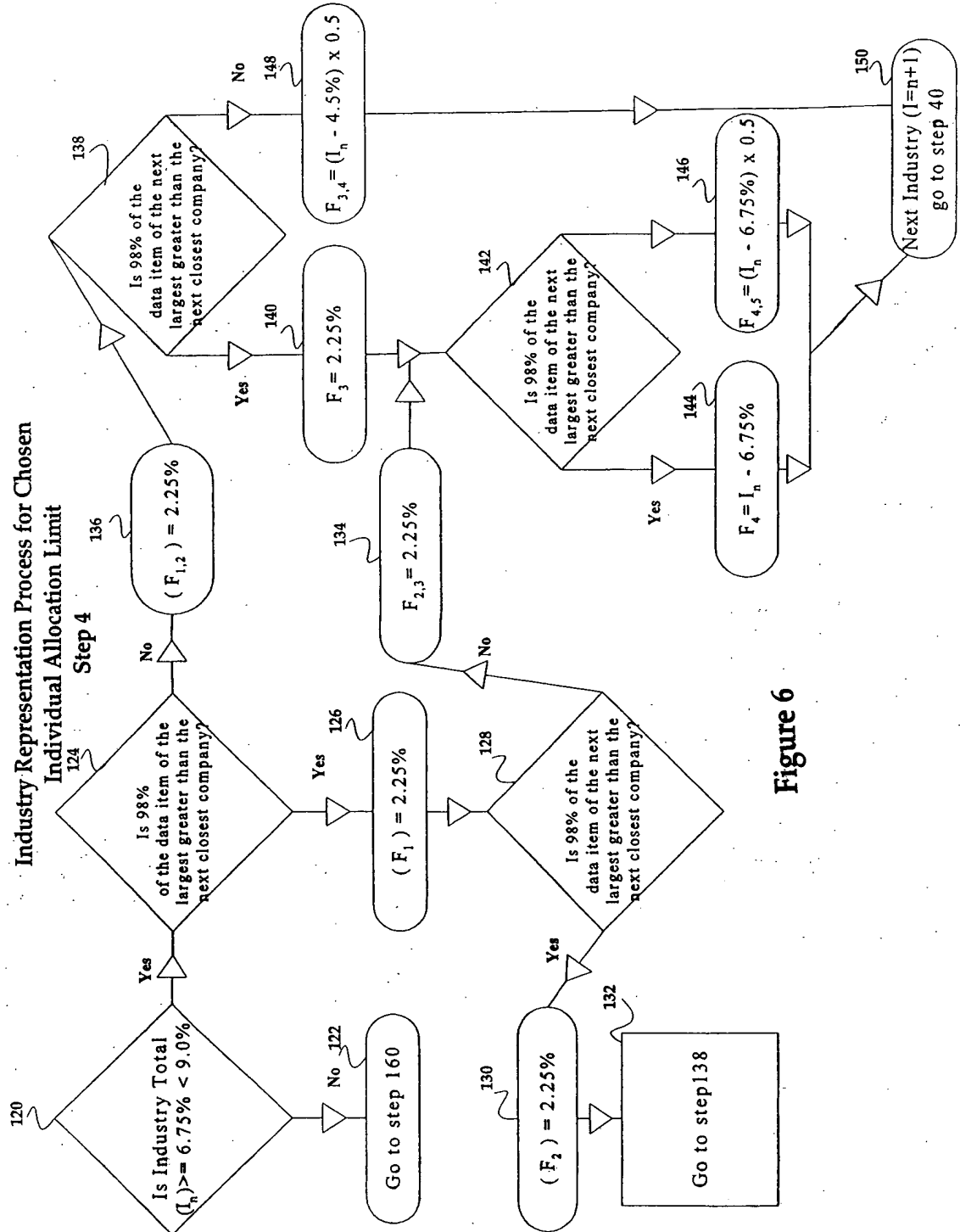


Figure 3



**Figure 4**





**Figure 6**

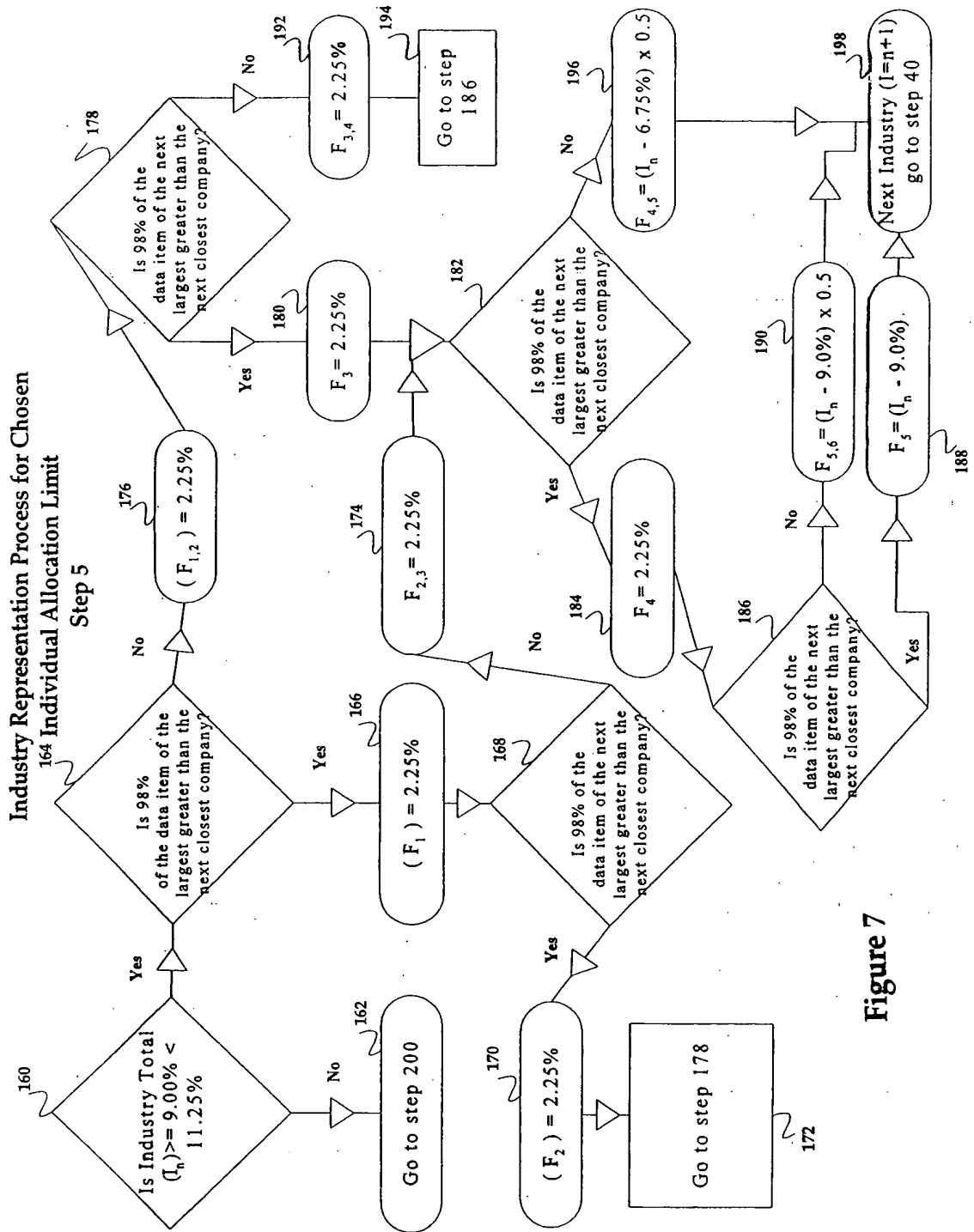


Figure 7

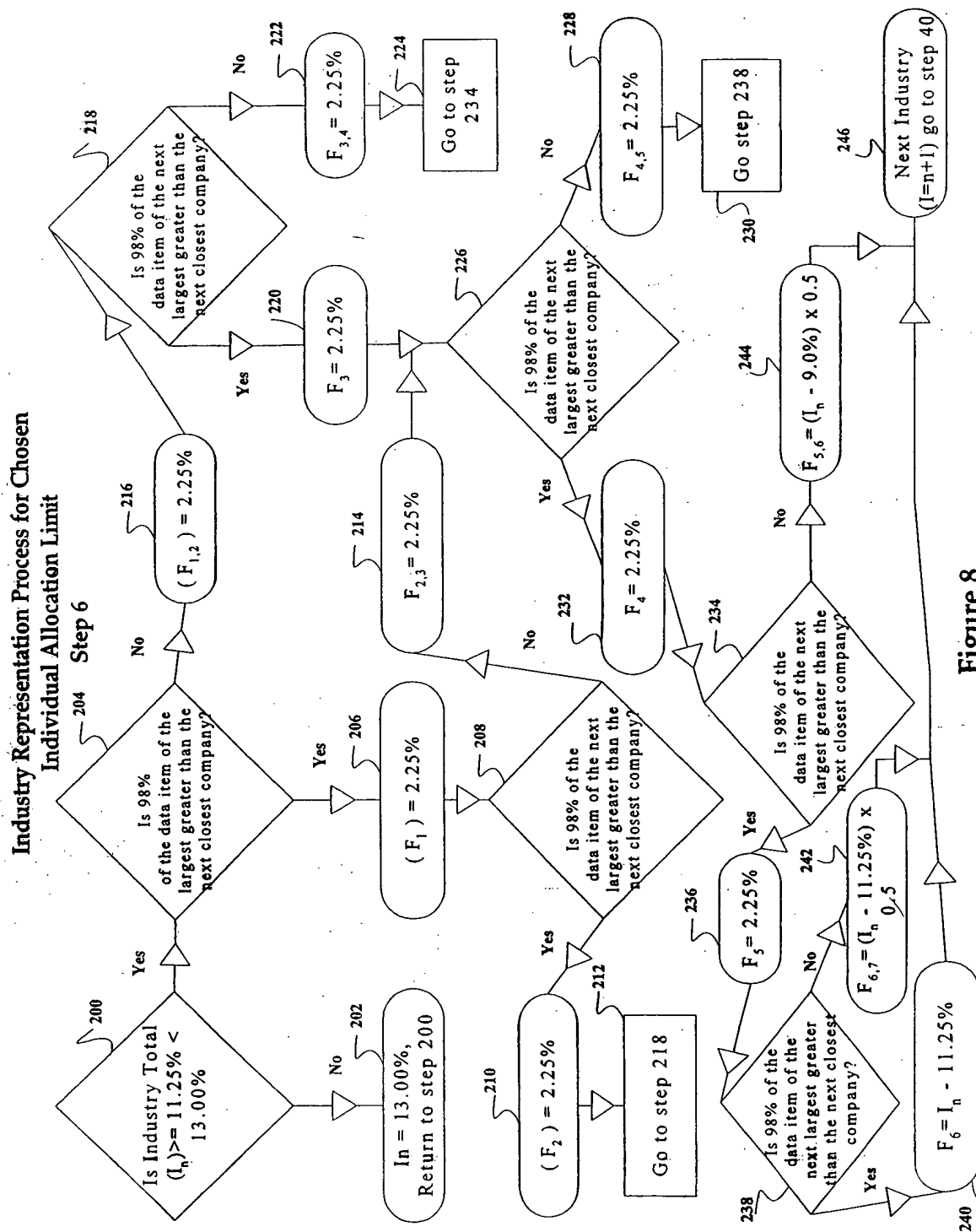


Figure 8



## Model Mechanics

### Variable Definitions:

F= Monthly investment factor (allocation n)

Pb= Price at beginning of month

Pe= Price at end of month

I<sub>n</sub> = Industry(n)

C<sub>z</sub> = Company(z)

j = number of Industries

k = number of companies within Industry

lnCz= Company z within Industry n

BMValue= Value of Strategy model at end of preceding month (value of 1000 12/31/86)

Value of individual investments  
at the beginning of the month

$$\sum_{n=1}^j \left[ \sum_{z=1}^k F(lnCz) BMValue \right]$$

Value of Strategy Model  
at the end of the month

$$\sum_{z=1}^k \left[ \sum_{n=1}^j ( F(lnCz) BMValue / Pb(lnCz) ) Pe(lnCz) \right]$$

note: For the majority of the industries, k equals 1. Most industries have only one representative. Please refer to the 12/31/99 industry list found in Figure 10.

Figure 9

### REPLACEMENT SHEET

Title: Apparatus and Method for Creating and Managing

Appl.: Gerald P. Sullivan Appl. #: 09/624,732

Atty. Docket #: 602-163-1U1 Customer #: 570

# REPLACEMENT SHEET

Title:- Apparatus and Method for Creating and Managing  
 Appl.: Gerald P. Sullivan Appl. #: 09/624,732  
 Atty. Docket #: 602-163-1U1 Customer #: 570

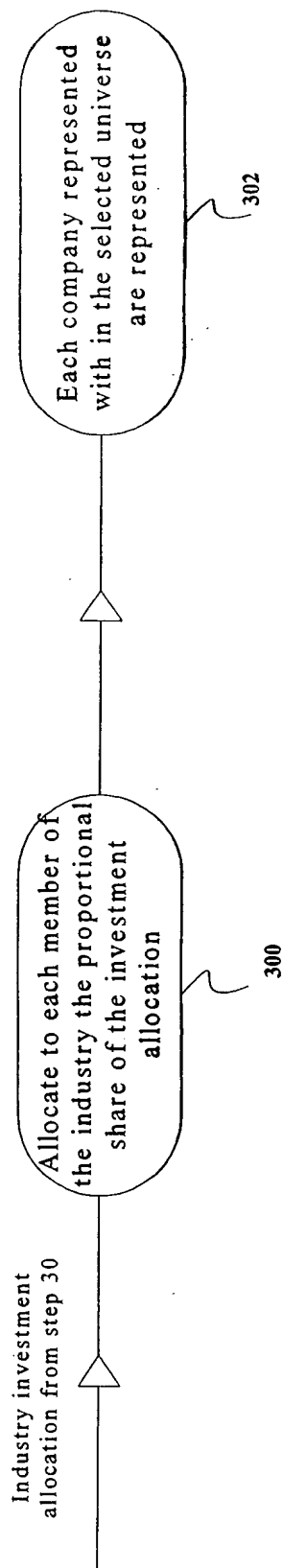
|                                |                                       | Dec99<br>Factor | (%) GL<br>12/31/99 |
|--------------------------------|---------------------------------------|-----------------|--------------------|
| Advertising                    | Interpublic Group Cos. Inc.           | 0.13%           | 22.74%             |
| Aerospace/Defense              | Boeing Co.                            | 1.31%           | 2.00%              |
| Air Transport                  | AMR Corp                              | 0.99%           | 10.06%             |
| Apparel                        | VF Corporation                        | 0.31%           | 1.15%              |
| Auto & Truck                   | Ford Motor Company                    | 1.55%           | 5.57%              |
| Auto Parts OEM                 | Delphi Automotive Systems             | 0.33%           | -0.98%             |
| Auto Parts OEM                 | Magna International Inc.              | 0.33%           | -3.00%             |
| Auto Parts Replacement         | Genuine Parts Co.                     | 0.12%           | -2.63%             |
| Auto Parts Replacement         | Tenneco Automotive Inc.               | 0.12%           | 18.25%             |
| Bank                           | Bank of America Corp.                 | 2.25%           | -13.50%            |
| Bank                           | Chase Manhattan Corp.                 | 2.25%           | 0.57%              |
| Bank                           | Wells Fargo Company                   | 2.25%           | -13.04%            |
| Bank                           | Bank One Corp.                        | 1.70%           | -8.03%             |
| Beverage (Alcoholic)           | Seagram Co. Ltd.                      | 0.65%           | 2.73%              |
| Beverage (Soft Drinks)         | Coca-Cola Co.                         | 0.73%           | -13.46%            |
| Building Materials             | Masco Corp.                           | 0.27%           | 0.00%              |
| Cable TV                       | Comcast Corp.                         | 0.13%           | 11.89%             |
| Cement & Aggregates            | Lafarge Corp.                         | 0.19%           | 2.31%              |
| Chemical - Basic               | Du Pont (E.I.) de Nemours             | 0.77%           | 10.83%             |
| Chemical Diversified           | Minnesota Mining & Mfg Co             | 0.78%           | 2.42%              |
| Chemical Specialty             | Rohm & Haas Co.                       | 0.78%           | 13.12%             |
| Computer and Peripherals       | International Business Machines Corp. | 2.25%           | 4.67%              |
| Computer and Peripherals       | Hewlett-Packard Co                    | 1.21%           | 20.06%             |
| Computer Software & Services   | Microsoft Corp.                       | 2.25%           | 28.23%             |
| Computer Software & Services   | Electronic Data Systems               | 0.24%           | 4.08%              |
| Diversified                    | Tyco International Ltd.               | 1.87%           | -2.62%             |
| Drug                           | Merck & Co., Inc.                     | 2.25%           | -14.25%            |
| Drug                           | Bristol-Myers Squibb Co.              | 0.14%           | -12.07%            |
| Drug                           | Pfizer Inc.                           | 0.14%           | -11.43%            |
| Drugstore                      | Walgreen Co.                          | 0.33%           | 0.43%              |
| Educational Services           | Sylvan Learning Systems Inc.          | 0.05%           | -1.42%             |
| Electric Utility Central       | Texas Utilities Co.                   | 2.17%           | 0.98%              |
| Electric Utility East          | Southern Co.                          | 2.25%           | 0.53%              |
| Electric Utility East          | Duke Energy Corp.                     | 0.46%           | -1.11%             |
| Electric Utility West          | PG&E Corp.                            | 1.07%           | -7.04%             |
| Electrical Equipment           | General Electric Company              | 2.16%           | 19.24%             |
| Electronics                    | JDS Uniphase Corp.                    | 0.76%           | 41.04%             |
| Entertainment                  | Walt Disney (Hldgs) Co                | 2.25%           | 4.93%              |
| Entertainment                  | Viacom Inc.                           | 0.14%           | 21.48%             |
| Environmental                  | Waste Management Inc.                 | 0.27%           | 1.48%              |
| Financial Services Diversified | American International Group          | 2.25%           | 4.22%              |
| Financial Services Diversified | Citigroup Inc.                        | 2.25%           | 3.36%              |
| Financial Services Diversified | American Express Company              | 0.53%           | 10.03%             |
| Financial Services Diversified | Loews Corp.                           | 0.53%           | -5.18%             |
| Food Processing                | Unilever N.V.                         | 1.68%           | 0.00%              |
| Food Wholesalers               | Supervalu Inc.                        | 0.16%           | 2.89%              |
| Furniture/Home Furnishings     | Leggett & Platt Inc.                  | 0.20%           | 0.00%              |
| Gold/Silver Mining             | Barrick Gold Corp.                    | 0.27%           | -1.74%             |
| Grocery Store                  | Albertson's Inc.                      | 0.63%           | 0.78%              |
| Healthcare Information Systems | IMS Health Inc.                       | 0.06%           | 15.38%             |
| Home Appliance                 | Whirlpool Corp.                       | 0.12%           | 6.66%              |
| Homebuilding                   | Centex Corp.                          | 0.27%           | 4.12%              |

Figure 10a

|                                 |                                      |       |         |
|---------------------------------|--------------------------------------|-------|---------|
| Hotel/Gaming                    | Park Place Entertainment Corp.       | 0.48% | -2.91%  |
| Household Products              | Procter & Gamble Co.                 | 0.79% | 1.45%   |
| Industrial Services             | Autonation Inc.                      | 0.64% | -0.67%  |
| Insurance - Life                | AXA Financial Inc.                   | 1.09% | 1.19%   |
| Insurance - Property & Casualty | Berkshire Hathaway Inc.              | 2.25% | -1.88%  |
| Insurance - Property & Casualty | Allstate Corp.                       | 2.05% | -8.11%  |
| Internet                        | At Home Corp.                        | 0.65% | -11.60% |
| Machinery                       | Caterpillar Inc.                     | 1.16% | 1.48%   |
| Manufactured Housing / RV       | Clayton Homes Inc.                   | 0.10% | -9.66%  |
| Maritime                        | Alexander & Baldwin Inc.             | 0.07% | 0.27%   |
| Medical Services                | Aetna Inc.                           | 1.63% | 2.17%   |
| Medical Supplies                | Johnson & Johnson                    | 1.83% | -10.12% |
| Metal Fabricating               | Illinois Tool Works                  | 0.34% | 4.62%   |
| Metals & Mining                 | Alcoa Inc.                           | 0.70% | 26.72%  |
| Natural Gas Distribution        | KeySpan Corporation                  | 0.41% | -9.29%  |
| Natural Gas Diversified         | Enron Corp.                          | 1.09% | 16.58%  |
| Newspaper                       | Gannett Co. Inc.                     | 0.55% | 14.27%  |
| Office Equipment & Supply       | Xerox Corp.                          | 0.60% | -16.39% |
| Oilfield Services               | Schlumberger Ltd.                    | 1.10% | -7.24%  |
| Packaging & Container           | Crown Cork & Seal Co. Inc.           | 0.38% | 9.82%   |
| Paper & Forest Products         | International Paper Co.              | 1.52% | 7.92%   |
| Petroleum Integrated            | Exxon Mobil Corp.                    | 2.25% | 1.58%   |
| Petroleum Integrated            | Royal Dutch Petroleum Company        | 2.25% | 4.42%   |
| Petroleum Integrated            | Chevron Corporation                  | 1.01% | -2.19%  |
| Petroleum Producing             | Burlington Resources Inc.            | 0.33% | -1.26%  |
| Precision Instrument            | Eastman Kodak Co.                    | 0.37% | 7.07%   |
| Publishing                      | McGraw-Hill Companies Inc.           | 0.23% | 8.71%   |
| Railroad                        | Burlington Northern Santa Fe Corp.   | 1.25% | -15.97% |
| Recreation                      | Carnival Corp.                       | 0.61% | 8.36%   |
| REIT                            | Equity Residential Props TR          | 0.61% | 8.11%   |
| Restaurant                      | McDonald's Corp.                     | 0.61% | -11.87% |
| Retail Building Supply          | Home Depot Inc.                      | 0.59% | 30.23%  |
| Retail Special Lines            | Toys R US Inc.                       | 1.05% | -18.21% |
| Retail Store                    | Wal-Mart Stores Inc.                 | 2.25% | 20.04%  |
| Retail Store                    | Penney (J.C.) Co.                    | 0.21% | -10.64% |
| Securities Brokerage            | Morgan Stanley Dean Witter & Company | 1.87% | 18.34%  |
| Semiconductor                   | Intel Corp.                          | 2.25% | 7.33%   |
| Semiconductor                   | Motorola Inc.                        | 0.09% | 26.29%  |
| Semiconductor Capital Equipment | Applied Materials Inc.               | 0.20% | 30.02%  |
| Shoe                            | Nike Inc.                            | 0.17% | 8.01%   |
| Steel (Integrated)              | USX-U.S. Steel Group Inc.            | 0.20% | 30.37%  |
| Steel General                   | Nucor Corp.                          | 0.20% | 8.93%   |
| Telecommunications Equipment    | Lucent Technologies Inc.             | 1.22% | 1.35%   |
| Telecommunications Service      | AT&T Corp.                           | 2.25% | -8.67%  |
| Telecommunications Service      | Bell Atlantic Corp.                  | 2.25% | -3.48%  |
| Telecommunications Service      | MCI Worldcom Inc.                    | 2.25% | -3.74%  |
| Telecommunications Service      | SBC Communications Inc.              | 1.55% | -7.38%  |
| Textile                         | Springs Industries Inc.              | 0.11% | 0.67%   |
| Thrift                          | Fannie Mae                           | 1.63% | -6.29%  |
| Tire & Rubber                   | Goodyear Tire & Rubber Co.           | 0.19% | -16.85% |
| Tobacco                         | Philip Morris Companies Inc.         | 0.79% | -10.55% |
| Toiletries/Cosmetics            | Gillette Company                     | 0.19% | 2.65%   |
| Trucking & Transport Leasing    | Hertz Corp.                          | 0.32% | 18.46%  |
| Water Utility                   | American Water Works Inc.            | 0.10% | -16.87% |

**Figure 10b**

**Individual Representation Within Industry for  
All Companies in the Selected Universe**



**Figure 11**